

**TABLE 3**

**FINNED DUBLE PIPE HAIRPIN MECHANICAL DESIGN DATA**

SHELLSIDE SCH. 40							TUBE SIDE										
Type	No. Fins	Fin Hgt	25 NFA	De In.	Af/Ao	Ao/Ai	Surface										Wall Thk
							O.D. In.	No. Tube	25 NFA	I.D. In.	10	20	30	Ft2/Ft	Ends		
2B	16	9/16	65.0	0.387	0.912	11.10	0.75	1	6.70	0.58	32.84	66.76	100.69	3.284	-2.70	0.083	
2D	16	7/16	58.1	0.394	0.849	6.55	1.0	1	13.66	0.83	27.65	56.22	84.79	2.765	-2.70	0.083	
2F	24	1/4	44.7	0.316	0.796	4.90	1.315	1	21.61	1.05	26.02	52.90	79.79	2.602	-2.70	0.133	
2.5D	16	9/16	92.2	0.510	0.878	7.74	1.0	1	14.86	0.87	34.11	69.34	104.57	3.411	-3.00	0.065	
2.5F	24	1/2	75.2	0.336	0.883	8.54	1.315	1	21.61	1.05	45.38	92.26	139.15	4.538	-4.80	0.133	
2.5G	24	5/16	59.0	0.338	0.784	4.66	1.66	1	37.39	1.38	32.61	66.30	99.98	3.261	-2.70	0.140	
2.5H	32	5/16	56.8	0.276	0.838	5.82	1.66	1	37.39	1.38	40.68	82.70	124.72	4.068	-3.60	0.140	
2.5H	24	1/4	43.6	0.271	0.715	3.55	1.9	1	50.90	1.61	28.99	58.93	88.87	2.899	-1.80	0.145	
2.5H	40	1/4	40.1	0.190	0.824	5.14	1.9	1	50.90	1.61	41.89	85.17	128.45	4.189	-3.30	0.145	
3H	24	1/2	103.4	0.418	0.829	5.93	1.9	1	50.90	1.61	48.35	98.29	148.23	4.835	-4.00	0.145	
3H	40	1/2	96.4	0.278	0.901	9.09	1.9	1	50.90	1.61	74.16	150.77	227.38	7.416	-6.50	0.145	
3J	24	1/4	68.8	0.378	0.660	3.00	2.375	1	83.89	2.07	31.39	63.82	96.25	3.139	-2.0	0.154	
3J	40	1/4	65.3	0.282	0.779	4.23	2.375	1	83.89	2.07	44.30	90.06	135.82	4.430	-3.30	0.154	
3.5H	24	3/4	160.5	0.484	0.878	8.30	1.9	1	50.90	1.61	67.71	137.65	207.59	6.771	-4.20	0.145	
3.5H	40	3/4	150.0	0.311	0.931	13.05	1.9	1	50.90	1.61	106.43	216.37	326.31	10.643	-7.10	0.145	
3.5J	24	1/2	125.9	0.473	0.790	4.85	2.375	1	83.89	2.07	50.75	103.18	155.61	5.075	-2.70	0.154	
3.5J	40	1/2	118.9	0.325	0.872	7.31	2.375	1	83.89	2.07	76.56	155.66	234.76	7.656	-4.17	0.154	
4H	24	1	226.4	0.544	0.905	10.67	1.9	1	50.90	1.61	87.07	177.01	266.95	8.707	-5.50	0.145	
4H	40	1	212.4	0.345	0.947	17.00	1.9	1	50.90	1.61	138.69	281.97	425.25	13.869	-9.50	0.145	
4J	24	3/4	191.8	0.547	0.848	6.70	2.375	1	83.89	2.07	70.11	142.54	214.97	7.011	-3.90	0.154	
4J	40	3/4	181.3	0.362	0.910	10.39	2.375	1	83.89	2.07	108.83	221.26	333.69	10.883	-6.90	0.154	
4K	24	1/2	145.5	0.510	0.752	4.26	2.875	1	119.69	2.47	53.28	108.33	163.38	5.328	-2.30	0.203	
4K	40	1/2	138.5	0.359	0.844	6.32	2.875	1	119.69	2.47	79.10	160.81	242.52	7.910	-4.30	0.203	
5L	24	5/8	246.5	0.694	0.752	4.25	3.5	1	184.82	3.07	66.13	134.45	202.76	6.613	-9.0	0.216	
5L	40	5/8	237.7	0.495	0.843	6.33	3.5	1	184.82	3.07	98.40	200.05	301.70	9.840	-9.0	0.216	
5L	56	5/8	229.0	0.378	0.889	8.41	3.5	1	184.82	3.07	130.66	265.65	400.63	13.066	-9.0	0.216	
6M	24	5/8	311.5	0.789	0.699	3.49	4.5	1	318.26	4.03	71.20	144.75	218.30	7.120	-2.0	0.237	
6M	48	5/8	298.4	0.512	0.832	5.86	4.5	1	318.26	4.03	119.60	243.15	366.70	11.960	-5.0	0.237	
6M	64	5/8	289.6	0.409	0.874	7.45	4.5	1	318.26	4.03	151.86	308.75	465.63	15.186	-8.0	0.237	